



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,842	08/29/2003	Bret A. Ferree	BAF-16402/29	2836
25006	7590	06/23/2008		
GIFFORD, KRASS, SPRINKLE, ANDERSON & CITKOWSKI, P.C			EXAMINER	
PO BOX 7021			SWEET, THOMAS	
TROY, MI 48007-7021				
			ART UNIT	PAPER NUMBER
			3774	
			MAIL DATE	DELIVERY MODE
			06/23/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/652,842  
Filing Date: August 29, 2003  
Appellant(s): FERREE, BRET A.

---

John G. Posa  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 03/19/2008 appealing from the Office action mailed 07/18/2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4759766	Buettner-Janz et al	7-1988
6273891	Masini	8-2001

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102/103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-25 and 31 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Buettner-Janz et al. (US 4,759,766). Buettner-Janz et al. discloses a system (figs. 2 and 5-7) including an artificial disc replacement (title) configured for placement within a vertebral disc space between opposing vertebral endplates, the ADR comprising; a component forming a cavity (at 8) between the component and one of the vertebral endplates; and a path (the channels between the teeth 3) fully capable of filling the cavity with cement (8, Col 5, lines 28-30).

With regard to claims 21 and 22, the is a channel/groove is defined by the gap between the anchors/teeth (3).

With regard to claim 23, the component includes a peripheral rim to form the cavity (as see in fig. 6, surface 2 conforms around the volume at 8 in a rim).

With regard to claim 24, the component is a rigid endplate (2).

With regard to claim 25, the component is polyethylene or other suitable polymeric material (Col 2, lines 48-56).

With regard to claim 31, including two components (such as shown in fig. 1-3 or 10 or 11), one proximate to each of the opposing vertebral endplates; and paths (the channels between the teeth 3) fully capable of having cement injected between each component and its respective vertebral endplate (once installed in the vertebral space but the teeth (3) are not completely anchored. There is a space/channel/groove between the teeth in which a needle could pass and inject cement into the cavity).

Claims 20-25, 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buettner-Janz et al. in view of Masini (US 6,273,891). Buettner-Janz et al. discloses a system as discussed above. However, Buettner-Janz et al. remains silent on any instruments for placing cement including an instrument for pressurizing the cement following introduction. Masini discloses another prosthetic system (fig. 3) including an instrument (43) for pressurizing the cement following introduction (Col 5, lines 29-42) for the purpose of filling and sealing the space (37) between prosthetic and bone with cement. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the prosthetic of Buettner-Janz et al to include an injection system as taught by Masini in order to fill and seal space between prosthetic and bone with the cement. Such a modification amounts to mere substitution of one functionally equivalent cement delivery system for another within the art of prosthetics.

With regard to claims 21 and 22, the is a channel/groove is defined by the gap between the teeth (3).

With regard to claim 23, the component includes a peripheral rim to form the cavity (as see in fig. 6, surface 2 conforms around the volume at 8 in a rim, Buettner-Janz et al).

With regard to claim 24, the component is a rigid endplate (2, Buettner-Janz et al).

With regard to claim 25, the component is polyethylene or other suitable polymeric material (Col 2, lines 48-56, Buettner-Janz et al).

With regard to claim 31, including two components (such as shown in fig. 1-3 or 10 or 11), one proximate to each of the opposing vertebral endplates; and paths (the channels between the 3s) fully capable of having cement injected between each component and its respective vertebral endplate (once installed in the vertebral space but the teeth are not completely anchored. There is a space/channel/groove between the teeth in which a needle could pass and inject cement into the cavity as rejected above, Buettner-Janz et al). Additionally, Buettner-Janz et al as modified includes paths (such as shown in fig 4 of Masini on the implant of Buettner-Janz et al).

#### **(10) Response to Argument**

Regarding the argument based on the 35 USC 102/103 rejection using Buettner-Janz et al (US 4759766), applicant is arguing that the structure of Buettner-Janz et al can not be used for the intended use as claimed. The structure of the claims is met by Buettner-Janz et al. Although the use as disclosed is different from the currently claimed intended use, Buettner-Janz et al is fully capable of being use as claimed. Buettner-Janz et al has structure for which cement can be

Art Unit: 3700

passed between the anchors/teeth (3) when the anchors are not fully imbedded in the vertebra so that the space between the anchors (3) is still an accessible “path to fill the cavity with cement”.

Regarding the argument based on the 35 USC 103 rejection using Buettner-Janz et al (US 4759766) in view of Masini (US 6273891), claims 20-22 are covered by the explanation of claim 31. The rejections of 20-22 and 31 are two pronged. First the “path”, “channel” or “groove” between the anchors (3) is fully capable of being used to connect to an injector (43, fig. 4 of Masini) and function as a “path to fill the cavity with cement” when the anchors are imbedded but not seated to the rim. Second, the teaching of Masini to use an injector (43) and a path (45) are an obvious modification as a substitute for filling the cavity with cement prior to implantation. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Buettner-Janz et al remains silent as to an instrument for pressurizing cement, but Masini provides a teaching in the relevant art of prosthetic joints to cement a prosthetic in place using an instrument for pressurizing cement for the purpose of filling the space there between with cement. This is a functional equivalent in the art of prosthetic joints. The main body of the 103 rejection clearly spells out the specific reasons why claim 29 is rejected. It happens that the rejection under 103 is also applicable to the remaining claims (20-25 and 31) with the two prong approach mentioned above.

Art Unit: 3700

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Thomas J Sweet/

Primary Examiner, Art Unit 3774

Conferees:

/Corrine M McDermott/

Supervisory Patent Examiner, Art Unit 3738

/Thomas Barrett/

TQAS TC3700